

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:030**

**Permittee Name:** Murakami Manufacturing USA, Inc.  
**Mailing Address:** 575 Water Tower Bypass  
Campbellsville KY 42719

**Source Name:** Same as above  
**Mailing Address:** Same as above

**Source Location:** 575 Water Tower Bypass  
Campbellsville, KY 42719

**Permit Number:** F-01-032 (Revision 1)  
**Source A. I. #:** 4303  
**Activity #:** APE20050001  
**Review Type:** Conditional Major  
Significant Revision, Construction/Operating  
**Source ID #:** 21-217-00039

**Regional Office:** Bowling Green Regional Office  
1508 Westen Avenue  
Bowling Green KY 42104  
(270) 746-7475

**County:** Taylor

**Application  
Complete Date:** March 03, 2005

**Issuance Date:** November 30, 2001

**Revision Date:** July 13, 2005  
**Expiration Date:** November 30, 2006

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**John S. Lyons, Director  
Division for Air Quality**

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Rev #	Permit Type	Log #	Complete Date	Issuance Date	Summary of Action
----	Initial Issuance	53985	08/18/01	11/30/01	
1	Significant Revision	—	03/01/05	07/13/05	Add Coating Line # 2

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS (CONTINUED)**

**Coating Line # 1**

**Emission Point: 01(PC1) Prime Spray Booth**

**Description:**

**MP1: Prime Coat**

Spray Operation System:

Construction Date: September 2001

The maximum capacity of the spray gun: 6.34 gals/hr

The transfer efficiency of the system: 70%

Water Wall (PM/PM10)

Estimated Control Efficiency: 90%

**MP2: Clean Up**

The maximum consumption of the material: 0.66 lb per hr

**Emission Point: 02(BC1) Base Spray Booth**

**Description:**

**MP1: Base Coat**

Spray Operation System:

Construction Date: September 2001

The maximum capacity of the spray gun: 21.4 gals/hr

The transfer efficiency of the system: 70%

Water Wall (Pm/PM10)

Estimated Control Efficiency: 90%

**MP2: Clean Up**

The maximum consumption of the material: 0.66 lb/hr

**Emission Point: 03(CC1) Clear Spray Booth**

**Description:**

**MP1: Clear Coat**

Spray Operation System:

Construction Date: September 2001

The maximum capacity of the spray gun: 21.4 gals/hr

The transfer efficiency of the system: 70%

Water Wall (PM/PM10)

Estimated Control Efficiency: 90%

**MP2: Clean Up**

The maximum consumption of the material: 0.66 lb/hr

**SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS (CONTINUED)**

**Emission Point: 04(CD1) Conductive Coat**

**Description:**

**MP1: Conductive Coat**

Construction Date:	September 2001
The maximum capacity of the spray gun:	0.16 gal/hr
The transfer efficiency of the system:	70%

Water Wall (PM/PM10)	
Estimated Control Efficiency:	90%

**MP2: Clean Up**

The maximum consumption of the material: 0.021 gal/day

**SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS (CONTINUED)****Coating Line #2:****Emission Point 8(PC2) Primer Spray Booth****Description:****MP1: Prime Coat**

Projected Installation Date:	June 2005
The maximum capacity of the spray gun:	9.52 gals/hr

**MP2: Clean up (Isopropyl Alcohol wipe to clean the parts)**

The maximum consumption of the material:	0.66 lb per hr
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**Control Parameters for Particulate emissions:**

Transfer Efficiency	70%
Water Wall (efficiency)	90%

**Control Parameters for VOC/HAP emissions:**

Carbon Adsorption System:	Performance test is needed to determine efficiency
Capture Efficiency	Performance test is needed to determine efficiency

**Emission Point 9(BC2) Base Coat Spray Booth****Description:****MP1: Base Coat**

Projected Installation Date:	June 2005
The maximum capacity of the spray gun:	9.52 gals/hr

**MP2: Clean up (Isopropyl Alcohol wipe to clean the parts)**

The maximum consumption of the material:	0.66 lb per hr
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**Control Parameters for Particulate emissions:**

Transfer Efficiency	70%
Water Wall (efficiency)	90%

**Control Parameters for VOC/HAP emissions:**

Carbon Adsorption System:	Performance test is needed to determine efficiency
Capture Efficiency	Performance test is needed to determine efficiency

## SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Point 10(CC2) Clear Coat Spray Booth

#### Description:

##### **MP1:** Clear Coat

Projected Installation Date:	June 2005
The maximum capacity of the spray gun:	9.52 gals/hr

##### **MP2:** Clean up (Isopropyl Alcohol wipe to clean the parts)

The maximum consumption of the material:	0.66 lb/hr
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##### **Control Parameters for Particulate emissions:**

Transfer Efficiency	70%
Water Wall (efficiency)	90%

##### **Control Parameters for VOC/HAP emissions:**

Carbon Adsorption System:	Performance test is needed to determine efficiency
Capture Efficiency	Performance test is needed to determine efficiency

#### APPLICABLE REGULATIONS:

- a. **401 KAR 52:030.** Federally-enforceable permits for non major sources.
- b. **401 KAR 59:010,** New Process Operations (applicable to each affected facility associated with a process operation commenced on or after July 2, 1975)

#### 1. Operating Limitations:

The usage rate of materials used in all affected facilities shall be limited so as not to exceed the emission limitations listed in Section B (2) below.

##### **Compliance Demonstration Method:**

See B (2) below

#### 2. Emission Limitations:

##### a. **Annual HAP'S Limitations:**

See D (5).

##### b. **Annual VOC Limitations:**

See Section D (4).

## **SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**c. Standard for Opacity (401KAR 59:010 Section (3)):**

The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility (s) which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If the visible emissions from the stack are seen (not including condensed water vapor within plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**d. Standard for Particulate Matter (401 KAR 59:010 Section 3(2)):**

For emission from a control device or stack, no person shall cause, suffer, allow or permit the emission in to the open air of particulate matter (PM) from any affected facility which in excess of 2.34 lb/hr.

**Compliance Demonstration Method:**

Compliance with the mass emission limitation is assumed when the water walls are in operation, according to manufacturer's recommendations.

**3. Testing Requirements:**

See Section D (1)

**4. Specific Monitoring Requirements :**

- a. For annual VOC limitations, See Compliance Demonstration Method in Section D (4) and D (7).
- b. For annual HAP's limitations, See Compliance Demonstration Method in Section D (5) and D (7).
- c. For opacity limitation, See Compliance Demonstration Method in Section B (2)(c).
- d. For particulate mass emission limitation, See Compliance Demonstration Method in Section B (2)(d).

**5. Specific Record Keeping Requirements:**

See Section D (7)

**SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements**

See Section D (8)

**7. Specific Control Equipment Operating Conditions:**

See Section E

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Two Curing Oven Natural Gas (0.4 and 1.0 mmBTU per hr each)	None
2. Two Air make Up Unit Natural Gas (1.8 and 4.0 mmBTU per hr each)	None
3. Annealing Oven Natural Gas (0.3 and 0.5 mmBTU per hr)	None
4. Plastic Molding Machine (1 - 460 ton machine)	401 KAR: 59:010
5. Plastic Molding Machine (3 - 360 ton machine)	401 KAR: 59:010
6. Plastic Molding Machine (1-80 ton machine)	401 KAR: 59:010
7. Mold Release (10 Gallons per year)	401 KAR: 59:010
8. Lubricant Spray (5 Gallons per year)	401 KAR: 59:010
9. 2 Space Heaters Natural Gas (0.2 mmBTU per hour)	None

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. Testing shall be conducted at such times as may be required by the cabinet in accordance with the Regulations 401 KAR 59:005 Section 2(2) and KAR 50:045 Section 4.
2. VOC and HAPS emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
3. As required by Section 1b of the material incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
4. The source has accepted a facility-wide cap on annual VOC emission of no more than 95 tons per rolling 12-month period (including VOC emissions from Insignificant Activities). The actual VOC emission shall be calculated based on 12-month rolling total.

### **Compliance Demonstration Method:**

The following equation may be used to calculate VOC emission:

Monthly VOC emission =  $\sum$ [Monthly usage of coatings or any other VOC containing material in pounds or gallons per month] x [VOC fraction] x [appropriate conversion factor (if usage is in gallons) for gallons to pounds for resin or any other VOC containing material used].

5. The source has accepted a facility-wide cap on annual individual HAP emission of no more than 9.5 tons per rolling 12-month period and combined HAPS emissions of no more than 23.75 tons per rolling 12-month period. The actual HAP/HAPs emission shall be calculated based on 12-month rolling total.

### **Compliance Demonstration Method:**

The following equation may be used to calculate the HAP emissions:

Monthly HAP emission =  $\sum$ [Monthly usage of coatings or any other HAP containing material in pounds or gallons per month] x [HAP fraction] x [appropriate conversion factor (if usage is in gallons) for gallons to pounds for resin or any other HAP containing material used].

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

6. 401 KAR 63:020; Potentially hazardous matter or toxic substances, applicable to each affected facility (s) which emits or may emit potentially hazardous matter or toxic substances.

### **Compliance Demonstration Method:**

The source is in compliance with 401 KAR 63:020 based on the emission rates of toxics given in the application submitted by the source. If the source alters process rates, material formulations, or any other factor that would result in an increase of toxic emissions or the addition of toxic emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, Section 3(1)(a), along with modeling to show that the facility will remain in compliance with 401 KAR 63:020

### **7. Specific Recordkeeping Requirements:**

- a. The permittee shall keep calendar month records of the usage of each coating, solvent, thinner diluent, and clean up solvent or any other VOC/ HAP containing material;
- b. At the end of each month volatile organic compound (VOC) and hazardous air pollutants (HAPS) emissions in tons shall be calculated and recorded;
- c. The annual emission for each rolling 12 month year shall be calculated and kept available at the plant site;
- d. The records listed above, as well as purchase orders and invoices for all VOC/HAP containing materials, shall be made available for inspection upon request by duly authorized representatives of the Division for Air Quality;
- e. The permittee shall keep records of all maintenance activities performed on the control equipment.

### **8. Specific Reporting Requirements:**

Reporting of the following shall be done on a semi annual-basis:

- a. Any deviations from requirements of section B shall be reported;
- b. The VOC emission for each month in the semi-annual period shall be reported;
- c. The individual HAP emissions for each month in the semi-annual period shall be reported;
- d. The combined HAPs emission for each month in the semi-annual period shall be reported;
- e. The rolling 12 month total for VOC during each month in the semi-annual period shall be reported;
- f. The rolling 12 month total of individual HAP's for each month in the semi-annual period shall be reported;
- g. The rolling 12 month total of combined HAP's for each month ending in the semi-annual period shall be reported.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

**a. For Particulate Matter  
Water Walls (one in each spray booth):**

**1. Operating Limitations:**

- i. The water wall shall be in place and functional at all times of operation of each spray booth.
- ii. The flow for the water wall shall be maintained to ensure uniformity of the water sheet across the surface of the water wall.

**2. Specific Monitoring Requirements :**

The permittee shall make a verification of the uniformity of the water sheet across the surface of the water wall, on a daily basis.

**3. Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the spray booth particulate controls:

- i. The design and/or manufacturer's specifications.
- ii. The operational procedures and preventive maintenance records.
- iii. The permittee shall note if any water wall is not in operation during spray coating operations for any time period.
- iv. If the water wall is not uniform, an inspection of the control device shall be made, corrective action shall be taken, and a log of these activities shall be maintained.
- v. With each observation above, note the date and identity of the personnel making the record.

**4. Specific Reporting Requirements**

The permittee shall maintain a copy of the water wall inspection and repair log for those times when corrective actions are required, either due to opacity exceedance or due to the lack of uniformity in the water sheet across the surface of the water wall.

## SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

**b. To Control VOC/HAPS from Emission Point 08, 09, and 10:**

**Carbon Adsorption**

**Description:**

Projected Date of Construction	June 2005
Carbon Adsorption System:	Performance test is needed to determine efficiency
Capture Efficiency	Performance test is needed to determine efficiency

**i. Control System**

**1. Operating Limitations:**

- a. The average pressure drop across the carbon filters must not fall below the pressure drop established during the performance test.
- b. The carbon adsorption shall be in place and functional at all times during the operation of the spray booths (emission points 08, 09, and 10).

**2. Testing Requirements:**

- a. The permittee shall conduct performance tests on the carbon adsorption collection system as prescribed in Section G (d)(5).
- b. The permittee shall record information that is necessary to document collection system operating conditions during the test and explain why the conditions represent normal operation.
- c. The permittee shall use values for collection system as determined by the most recent performance tests.

**3. Specific Monitoring Requirements:**

- a. During the performance test, the permittee must monitor and record the pressure drop of the air stream across the carbon filters at least once every 15 minutes during each of the three runs of the performance test.
- b. Use the data collected during the performance test to calculate and record the average pressure drop. This is the minimum operating limit for the air stream across the carbon filters.
- c. The permittee shall perform a qualitative visual opacity observation once per week. Visible emissions from the carbon adsorber (not including condensed water vapor within plume) shall necessitate observation using Method 9 from 40 CFR 60, Appendix A to determine if opacity readings are greater than 20%.

## SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

### 4. Specific Recordkeeping Requirements:

The following records shall be kept:

- a. For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.
- b. The permittee shall keep the written startup, shutdown, and malfunction plan for the life of the affected source. If the plan is revised, previous versions shall be kept for 5 years after the revision.
- c. The records required to show continuous compliance with each limit specified in Operating Limitations.
- d. Results of the performance test conducted.
- e. Coating operation conditions during the performance test showing that the test was conducted under representative operating conditions.
- f. Data and calculations used to establish control device operating limits.
- g. The record of weekly qualitative visual opacity observations.

### 5. Specific Reporting Requirements:

#### a. Control Device Performance Test

See Section G (d) (5), (7), and (8)

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

### **ii. Emission Capture System**

#### **1. Operating Limitations:**

- a. Emission capture system that is a Permanent Total Enclosure (PTE)
  1. The direction of the air flow at all times must be into the enclosure; and either
  2. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
  3. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.
- b. Emission capture system that is not a PTE
  1. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device during the most recent performance test.

#### **2. Testing Requirements:**

- a. The permittee shall conduct performance tests on the booth enclosures as prescribed in Section G (d)(5), using EPA Method 204, or Division approved alternatives.
- b. Pursuant to Section VII 2(1) of the Policy Manual of the Division for Air Quality as incorporated by reference in 401 KAR 50:016, Section 1. (1), the permittee shall submit a compliance test protocol at least one month prior to the projected test date.
- c. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
- d. The permittee shall record information that is necessary to document emission capture system operating conditions during the test and explain why the conditions represent normal operation.
- e. For each capture device that is not part of a PTE, establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified below.
  1. During the capture efficiency determination, monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in the emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.
  2. Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.
- f. The permittee shall use values for capture efficiencies as determined by the most recent performance tests.

**SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS****3. Specific Monitoring Requirements:**

- a. Emission capture system that is a PTE  
The permittee must monitor the direction of air flow, and either the facial velocity of air through all natural draft openings, or the pressure drop across the enclosure.
- b. Emission capture system that is not a PTE  
The permittee must monitor the average gas volumetric flow rate or duct static pressure in each duct between a capture device and carbon adsorption. Calculate and record the 3-hour average volumetric flow rate or duct static pressure.

**A. Capture Efficiency Monitoring with Flow Measurements**

Each flow measurement device must meet the following requirements:

1. Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.
2. Use a flow sensor with an accuracy of at least 10 percent of the flow.
3. Perform an initial sensor calibration in accordance with the manufacturer's requirements.
4. Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.
5. Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.
6. Perform leak checks monthly.
7. Perform visual inspections of the sensor system quarterly if there is no redundant sensor.

**B. Capture Efficiency Monitoring with Pressure Drop Measurements**

Each pressure drop measurement device must meet the following requirements:

1. Locate the pressure sensor(s) in or as close as possible to a position that provides a representative measurement of the pressure drop across each opening monitored.
2. Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.
3. Perform an initial calibration of the sensor according to the manufacturer's requirements.
4. Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
5. Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

## SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

6. Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.
7. Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

### 4. **Specific Record Keeping Requirements:**

The permittee shall maintain records to show capture efficiencies remain constant, including the following information:

- a. Maintain records of the initial sensor calibrations, validation checks and accuracy audits.
- b. Maintain a log of the monthly leak checks.
- c. Maintain a log of the visual inspections of the sensor systems (monthly for pressure measurements, quarterly for flow measurements).
- d. For each capture system that is a PTE;
  1. Maintain records of the data and documentation used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent.
  2. Continuously record the direction of air flow, and either the average facial velocity of air through all natural draft openings, or the pressure drop across the enclosure.
  3. Record all periods (during coating operations) during which the direction of airflow is out of the enclosure. Record all periods during which the average facial velocity of air through the natural draft openings is less than 200 feet per minute; or the pressure drop across the enclosure is less than 0.007 inch H<sub>2</sub>O. Each such occurrence shall be considered a deviation from permit requirements. See **Specific Reporting Requirements** and Section F(6), F(7) and F(8).
- e. For emissions reporting, treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation.
  1. For each capture system that is not a PTE;
    - a. Maintain records of all data and documentation you used to determine capture efficiency.
    - b. The capture efficiencies recorded during testing and the values of the average volumetric flow rates or duct static pressures that will be monitored corresponding to those capture efficiencies.
    - c. Continuously record the average gas volumetric flow rate or duct static pressure in each duct between a capture device and the control device. Calculate and record the 3-hour average volumetric flow rate or duct static pressure.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

- d. Record all 3-hour periods (during coating operations) during which the average gas volumetric flow rate or duct static pressure in each duct between a capture device and the control device is less than the volumetric flow rate or duct static pressure limit established for that capture device during the most recent performance test. Each occurrence shall be considered a deviation from permit requirements, See **Specific Reporting Requirements** and Section F(6), F(7) and F(8).

### **5. Specific Reporting Requirements:**

- a. The permittee shall identify, record, and submit a written report to the Division's Bowling Green's Field office for each deviation from the permitted conditions.
  1. For any PTE, this is any period during which the direction of airflow is out of the enclosure, during which the facial velocity of air through the natural draft openings is less than 200 feet per minute, or during which the pressure drop across the enclosure is less than 0.007 inch H<sub>2</sub>O.
  2. For any enclosure that is not a PTE, this is any 3-hour period during which the average gas volumetric flow rate or duct static pressure in each duct between a capture device and the thermal oxidizer is less than the volumetric flow rate or duct static pressure limit established for that capture device during the most recent performance test.
- b. If no deviations occur during a particular 6-month period, the permittee shall state this in the semi-annual report required by Section Condition F(6).

## **SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b (IV)(1) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality[401 KAR 52:030 Section 3(1)(f)1a and Section 1a (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.5 [Section 1b V(3) and (4) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Pursuant to 401KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. **Annual compliance certifications should be mailed to the following addresses:**

**Division for Air Quality  
Bowling Green Regional Office  
1508 Westen Avenue  
Bowling Green KY 42104**

**Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601**

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission survey is mailed to the permittee. If a KYEIS emission report is not mailed to the permittee, comply with all other emission reporting requirements in this permit.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork..
12. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
  - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - i. The size and location of both the original and replacement units; and
    - ii. Any resulting change in emissions;
  - b. The PTE of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - i. Re-install the original unit and remove or dismantle the replacement unit; or
    - ii. Submit an application to permit the replacement unit as a permanent change.

## SECTION G - GENERAL PROVISIONS

### (a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a (2) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a (5) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
5. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Sections 1a (6) and (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

6. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].
7. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a (11) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
8. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a (3) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a (12)(b) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
10. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a (9) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
11. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
12. This permit does not convey property rights or exclusive privileges [Section 1a (8) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
13. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
15. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
17. Permit Shield – A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in this permit; and
  - b. Non-applicable requirements expressly identified in this permit.
18. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].
19. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

(c) Permit Revisions

1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, **Emission Points 08, 09 and 10** in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:030, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the final permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration test on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G (d) 7, 8 this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
  7. Pursuant to Section VII 2 (1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
  8. Pursuant to Section VII 1 (2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.
- (e) Acid Rain Program Requirements
1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- (f) Emergency Provisions
1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
    - a. An emergency occurred and the permittee can identify the cause of the emergency;
    - b. The permitted facility was at the time being properly operated;
    - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
    - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
  2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

3. Emergency conditions listed in General Provision G(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof[401 KAR 52:030 Section 23(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - e. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - f. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - g. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

None

**SECTION I - COMPLIANCE SCHEDULE**

None